

Claims

WHAT IS CLAIMED IS:

1. In a computer system, a method for retrieving a resource of program code from a source
5 of program code and placing the resource in secure cache in the computer system, the method comprising:
 - impersonating a user profile in the computing system so that the computing system
follows the user profile during retrieval of the resource;
 - picking a source for the resource;
 - 10 opening the resource;
 - testing based on the user profile whether the user has access to the resource; and
 - reading the resource to the secure cache if the user has access.
2. The method of claim 1 further comprising:
15 writing the resource into the secure cache; and
verifying the resource written in secure cache is same as resource in source.
3. The method of claim 1 further comprising:
 - picking a new source for the resource if the user does not have access; and
 - 20 opening the resource in the new source and reading the resource to the secure cache if the
user has access to the resource in the new source.
4. The method of claim 3 further comprising:
 - writing the resource into the secure cache; and
 - 25 verifying the resource written in secure cache is same as resource in source.

5. The method of claim 4 further comprising:

un-impersonating the user profile to return the computing system to the system profile.

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6. A source engine system in a computing system for retrieving a program code resource from one of a plurality of sources of program code, the source engine system comprising:

an open resource module for opening a program code resource in a source if the user has access;

5 a pick source module picking a second source for the resource program code if the user does not have access; and

a read data module putting the program code resource to a writer module for a secure cache in the computing system.

10 7. The system of claim 6 further comprising:

an extractor module extracting a program code resource contained within another program code resource.

8. The system of claim 6 wherein:

15 the writer module writes the program code resource into the secure cache.

9. The system of claim 8 further comprising:

a verify module verifying the program code resource in secure cache matches the program code resource in the source; and

20 a delete module deleting the program code resource from secure cache if the program code resource in secure cache does not match the program code resource in the source.

10. The system of claim 9 further comprising:

a mark module marking the program code resource available to the computing system if
the program code resource is verified by the verify module.

11. The system of claim 10, wherein the source engine system profile impersonates the user
5 profile during retrieval of the program code resource and returns to the system profile after the
program code resource is written to secure cache.

12. A computer readable medium for storing computer instructions for a computer process for caching a resource in a secure cache in the computing system, the computer process comprising:

replacing the system profile with the user profile when caching a resource;
 5 reading the resource from a source of program code if the user profile indicates the user has access; and
 writing the resource into secure cache when the resource is read from the source of program code; and
 removing the user profile and returning to the system profile after writing the resource
 10 into cache.

13. The computer readable medium of claim 12 wherein the computer process further comprises:

detecting whether or not the resource is in the secure cache;
 15 verifying the resource if it is in the secure cache; and
 deleting the resource from secure cache if the resource is not verified;

14. The computer readable medium of claim 13 wherein the computer process further comprises:

20 testing whether the resource is contained in another resource if it is not in the secure cache; and
 extracting the resource from the another resource if it is contained in another resource.

15. The computer readable medium of claim 12 where in the computer process the act of
 25 reading comprises:

opening the resource in a first source if the user has access to the resource in the first
source;

picking a second source for the resource if the user does not have access to the resource in
the first source; and

5 opening the resource in the second source.

16. The computer readable medium of claim 12, where in the computer process the act of
writing a resource further comprises:

verifying the resource written into cache matches the resource in the source.

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17. The computer readable medium of claim 16, where in the computer process the act of
writing a resource further comprises:

deleting the resource written into cache if the resource does not match the resource in the
source.

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18. The computer readable medium of claim 16, where in the computer process the act of writing
a resource writes the resource into cache while the resource is being read from the source.

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